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| **Halifax County Schools Elementary School Lesson Plan** | | | | | | | | |
| Subject: MATH | **Teacher:** | | | **Grade Level: Second Grade** | | **Date(s): September 26-30, 2016** | | |
| **Content :**  Common Core Standards & Essential Standards | **2.NBT.3** Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.  **2.NBT.9** Explain why addition and subtraction strategies work, using place value and the properties of operations  **2.OA.1.** Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. | | | | **Can Statements /Learning Targets** (I can……..)  I can add and subtract to solve one-step word problems using equations and drawings.  I can identify how many hundreds, tens, and ones are in a number.  I can explain what strategy I used to solve my problem.  I can read and write numbers and number names  (words) to 1,000.  I can read and write a numbers up to 1,000 in expanded form. | | | |
| Essential Question(s): (What question(s) should students be able to answer at the end of the lesson/unit?) | How do I represent numbers to 1,000 using a variety of models?  What strategy did you use to find the sum or difference? Why does it work?  What strategy did you use to solve the word problems? Why does it work? | | | | **Standard for Mathematical Practice:**  **1. Makes sense and perseveres in solving problems.**  **2. Reasons abstractly and quantitatively.**  3. Constructs viable arguments and critiques the reasoning of others.  **4. Models with mathematics.**  **5. Uses appropriate tools strategically.**  **6. Attends to precision.**  7. Looks for and makes use of structure.  **8. Looks for and expresses regularity in repeated reasoning.** | | | |
| **Vocabulary:**  Academic/Content | equation, sum, difference, add, subtract, addend, unknown, combine, put together, take apart, compare**,** addition, subtraction, strategy, sum, difference, digit, doubles, near doubles, count-on, count-back, part, total, pattern**,** place value, models, expanded form, hundreds, tens, ones, bundle, digits, skip count, addition, subtraction, count, sequence**,** base ten, models, tens (longs), ones (cubes), hundreds (flats), expanded form, standard form, place value**,** place value**,** compose, decompose, addition, subtraction, digit, models, associative property, commutative property, identity property, hundreds, tens, ones, collect, organize, show, data, attribute, sort, picture graph, bar graph, most, least, more than, less than, same, different, fewer, how many more, comparison | | | | **Technology Connection:** <http://www.softschools.com/math/place_value/games/tens_and_ones/>  <http://www.ixl.com/math/grade-2/place-value-models-tens-and-ones>  <http://www.ixl.com/math/grade-2/place-value-models-up-to-hundreds>  <http://www.softschools.com/quizzes/math/different_ways_to_show_a_number_3_digit__place_value/quiz5413.html>  <http://www.softschools.com/quizzes/math/multiple_ways_to_make_a_number_two_digits_place_value/quiz5405.html> | | | |
| **Literature Connection:**  Two Ways to Count To Ten – Ruby Dee  Mission: Addition - Loreen Leedy  The Great Take-Away – Louise Matthews  Anno’s Magic Seed – Mitsumasa Anno  Elevator Magic – Stuart J. Murphy | | | |
| **Materials Needed:** | * Math Mountain cards * Number line for small group work * Comparison Story Problem wksht. | * Snap cubes, unifix cubes, buttons, etc. to use for problem solving | | | * Anchor chart for Common Addition/Subtraction Situations * Sample Comparison Story Problems | | | |
| **Center Rotation Activities** | **Math with Teacher**  Teacher will work with small groups on using the number line for place value. Have various number cards to place on number line based on value. | **Math Fluency**  Have pairs quiz each other on basic addition or subtraction math facts with flash cards. | | | **Technology**  [**http://www.sheppardsoftware.com/mathgames/placevalue/fruit\_shoot\_place\_value.htm**](http://www.sheppardsoftware.com/mathgames/placevalue/fruit_shoot_place_value.htm) | | | **Writing About Math**  Two Ways to Count to Ten center activity-found in 2nd Grade PLC Folder |
| **Monday**  **Subject Integration:** | **Whole Group**  **Teacher needs to prepare ahead by reading the Common Addition and Subtraction Situation sheet found in PLC folder (General Resources). Teacher also needs to prepare an anchor chart for addition and subtraction so the students can classify their word problems and understand what they are looking for in the equations.**  Write a 12, 7, 5 Math Mountain on the board and ask the children to suggest an addition equation that can be written from the Math Mountain. Write that equation on the board. .(ex. 5 + 7 = 12)  Introduce **unknown totals** by using a sticky note to cover the total of the Math Mountain that is on the board. Have the students turn and talk to a neighbor about a story problem that can be solved with this equation. Share a few of the story problems that have a total of 12 by adding 7 and 5.  Introduce **unknown addends** by moving the sticky note to cover the second number or addend. Have the children write this equation on their boards and cover the unknown partner. Let students create a story problem with an unknown partner that equals the total of 12.  Ask children to solve a subtraction equation from the previous Math Mountain of 12, 7, and 5. Create subtraction equations with unknown partners and unknown totals using the equation 12 – 7 = 5. Use the sticky notes to cover the partners.  Put the students in 4 groups. Have children suggest and solve story problems for the math mountain equations using 9, 4, & 13. (9 + 4 = 13, 4 + 9 = 13, 13 – 9 = 4, 13 – 4 = 9)  **Independent Work**  Have students complete the following journal prompt:  Write a story problem that fits the equation below and solve it.  6 + = 13 | | | | | | **Assessment (formative/summative)**  <http://commoncoretasks.wikispaces.com/> | |
| **Tuesday**  **Subject Integration:** | **Whole Group**  Refer to the Common Addition/Subtraction Anchor Chart for review. **Remember to use the correct vocabulary: Math Mountains are fact families. Some resources call them number bonds so be careful when looking for material.** Review unknown totals and unknown addends from yesterday. Model again how to create story problems using math mountains for 6, 9 & 15. Cover the total and get suggestions on what the story problem could be. Then, cover an addend and get suggestions on what the story problem could be.  **Independent Work**  Have the students complete the sheet “Think About the Situation” found in PLC folder for week 5. Make sure that students know to match the story problem to the correct equation by drawing a line from the equation to the story problem. Then solve the equation. Discuss the answers as a class and have volunteers share the story problems they wrote for number 6. | | | | | | **Assessment (formative/summative)**  <http://commoncoretasks.wikispaces.com/> | |
| **Wednesday**  **Subject Integration:** | **Whole Group**  Create a list of addition and subtraction strategies that students have learned in the past few weeks and last year in first grade **(You will create an anchor chart to be used next week)**. Strategies should include: counting on, making ten, creating an easier problem, doubles, using the opposite operation, etc. As students share strategies to add to anchor chart, take time to briefly review the strategy and add examples to the list.  Arrange students in small groups of 3-4 students. Display several problems, one at a time, and have students determine the answer and explain to their group which strategy they used. Remind students that it is important to not only determine the correct answer, but also explain which strategy they used. After students share with their small groups, invite students to share with the class.  **Independent Work**  Give each student **Addition and Subtraction Strategies** sheet in PLC Folder for week 5. | | | | | | **Assessment (formative/summative)**  <http://commoncoretasks.wikispaces.com/> | |
| **Thursday**  **Subject Integration:** | **Whole Group**  ***Comparison Problems***  **Provide manipulatives for students to solve problems, including snap cubes, square tiles, etc.**  A comparison story problem is a problem that compares two or more things or people. Comparison problems have the words *more* or *fewer.* Explain to students that we will use the words more, fewer, and compare to solve story problems. Present the following problem for students to solve:  **Jane and Ernie have some apples. Jane has 6 apples and Ernie has 9 apples. Who has more apples? How many more?**  To help guide the students’ thinking, write the following questions on the board.   * + Ask: *What* is the problem about?   + Ask: *What* are the two questions?   + Ask: *How* many apples does Jane have?   + Ask: *Who* has more apples?   + Ask: *Who* has fewer apples?   + Ask: Based on these answers, do we add or subtract? Why?   Allow students several minutes to solve the problem. Encourage students to manipulatives to help solve the problem. Have student volunteers give the strategy they used to solve the problem. Repeat this several times, especially with the questions to help break down the problem.  **Independent Work**  Give students a copy of the comparison word problem worksheet (found in PLC folder). Students will answer questions, solve the problem and write strategy used. | | | | | | **Assessment (formative/summative)**  <http://commoncoretasks.wikispaces.com/> | |
| **Friday**  **Subject Integration:** | **Whole Group**  Comparison Problems  Explain to students that we will again use the words more, fewer, and compare to solve story problems. Encourage students to think: *What is the problem about? What information is important? What is the problem asking? Who has more? Who has fewer?* Present a comparison story problem for students to solve. Allow students several minutes to solve the problem. Encourage students to use drawings and/or manipulatives to help solve the problem Invite 2-3 students to share their solutions and strategies used to solve the problems. Repeat process for the remaining problems. **(Sample Comparison Story Problems are in folder or you may create some!)**  Review math strategies anchor chart again.  **Independent Work**  Math Journal Prompt: Which addition or subtraction strategy do you like the best and why? | | | | | | **Assessment(formative/summative)**  <http://commoncoretasks.wikispaces.com/> | |
| **Reflection-Checking for Understanding**  Students in need of remediation:  Action/Activities: | | | **Reflection-Checking for Understanding**  Students on target:  Action/Activities: | | | | **Reflection-Checking for Understanding**  Students who need enrichment:  Action/Activities**:** | |